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COLORADO'S TAX STRUCTURE

BY

EARL C. CROCKETT

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PREFACE

This study brings together in one volume the analysis of a number of significant aspects of Colorado's tax structure, including a brief description of certain developments in the state since completion of my previous, and more specialized, tax studied in 1946 and 1947.

This investigation was largely made possible by a grant received from the Council on Research and Creative Work, University of Colorado, for which I wish gratefully to express my appreciation.

Also I wish to thank the various state administrative officials of Colorado who so generously supplied factual information and who critically read parts of the manuscript. Although helpful suggestions were obtained from several state public officials, the writer assumes full responsibility for all interpretations and recommendations contained in the study.

EARL C. CROCKETT

BOULDER, COLORADO
August, 1950

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COLORADO'S TAX STRUCTURE

CHAPTER I

STATE TAX TRENDS, 1930–1949

In order to understand more fully the present tax structure of the state of Colorado, it is well briefly to review developments of the past twenty years. The twenty-year period covers the two decades from 1930 to 1949 inclusive. During these years, rather profound changes occurred in the state's tax system. The decade of the thirties, with its great depression, introduced a number of social and economic reforms for which the state assumed an increasing amount of responsibility. Three of these developments—two of them new, the other merely accelerated—overshadowed all other fiscal changes.

Most important of the three developments from a revenue standpoint was the introduction of a system of old age pensions accompanied by two new taxes—the general sales tax and the "family" of liquor taxes. Secondly, during the decade, the practice was first adopted of extending state aid, from tax revenue, to the public schools. This latter change was made possible by the establishment of a state income tax. Third, the state began assuming an ever-increasing responsibility for construction and maintenance of highways. Consequently, gasoline and motor vehicle license tax collections more or less constantly expanded, not only during the thirties, but also during the subsequent decade.

The forties brought changes in the tax system, not by the introduction of new revenue measures, but rather in the form of important increases in the productivity of already established taxes. The Second World War, with its great inflation, was accompanied by a phenomenal growth of national income. Both inflation and the rise of national income continued to spiral upward in the postwar years until 1949. These economic changes made necessary, and also possible, the collection of additional tax revenue. As a consequence, tax yields increased. These increases came partly as a by-product of inflation and of expanded national income but also partly because of upward revision of tax rates.

The accompanying table shows the trend of state tax collections over the twenty-year period. It may be observed that collections declined from $15 million in 1930 to $11 million in 1933. This reduction was primarily due to shrinkage of property-tax assessments as the severity of the depression grew worse. However, from 1933 the trend was reversed, collections climbing to $30 million by the end of the

decade. The trend continued through the forties, reaching $87 million by 1949. The over-all increase from $15 million in 1930 to $87 million in 1949 represents a growth of state tax collections of nearly six fold for the entire period.

COLORADO STATE TAX RECEIPTS, 1930–1949[1]

Year	State taxes (millions)	Year	State taxes (millions)
1930	15	1940	33
1931	15	1941	37
1932	13	1942	38
1933	11	1943	41
1934	13	1944	41
1935	16	1945	42
1936	23	1946	51
1937	25	1947	61
1938	28	1948	76
1939	30	1949	87

[1] Fiscal years. Unemployment compensation taxes are not included.

Sources: *State Tax Collections*, Bureau of the Census, except for the years 1932–1936. Figures for these years were estimated from data in the *Colorado Year Book, 1945–47*.

CAUSES OF TAX INCREASE

Let us briefly analyze causes for this apparently phenomenal increase. Principal causes, as already intimated, may be classified as follows: (1) inflation and growth of national income, (2) assumption of new functions, and (3) increase of state aid for local functions.

From the low point of the depression in 1933, when the cost-of-living index was 92.4, prices rose gradually until 1940, then more rapidly with the war and postwar years until by 1948 the index was 171.2. A slight decline in 1949 brought the cost-of-living index down to 169.1.[1] As prices and costs increased, the cost of government naturally increased also. State governmental departments, agencies, and institutions were forced to pay constantly more for supplies, materials, and salaries. However, during the period, income payments to individuals in Colorado, reflecting the growth of national income, increased at such a pace that if we relate total state tax collections by years to annual income payments, the ratio does not show an appreciable change throughout the twenty years. These ratios are given in an accompanying table.

It may be seen from the table that state taxes equaled 2.6 per cent of income payments in 1930, that the percentage increased during the depression, largely because of shrinkage of income payments, and that the percentage continued to increase throughout the thirties because of expanding governmental costs until

[1] Bureau of Labor Statistics, Department of Labor.

it reached a peak of 5.6 per cent by the end of the decade. After 1940 the trend was downward until 1946, when ratios began climbing again. However, the 1947 ratio of 3.7 per cent, in spite of comparatively large tax collections, was practically identical with the ratio of 3.6 for 1932. The percentage in 1949, although double the ratio of 1930, coincided with the percentages of several prewar years.

TOTAL STATE TAX RECEIPTS RELATED TO INCOME PAYMENTS TO INDIVIDUALS IN COLORADO, 1930–1949

Year	Income payments (millions)	State taxes[1] (millions)	Percentage taxes to income payments
1930	$580	$15	2.6
1931	478	15	3.1
1932	362	13[2]	3.6
1933	358	11[2]	3.1
1934	404	13[2]	3.2
1935	446	16[2]	3.6
1936	538	23[2]	4.4
1937	584	25	4.3
1938	526	28	5.3
1939	563	30	5.3
1940	589	33	5.6
1941	695	37	5.3
1942	990	38	4.0
1943	1,144	41	3.6
1944	1,157	41	3.5
1945	1,274	42	3.3
1946	1,393	51	3.7
1947	1,656	61	3.7
1948	1,713	76	4.4
1949	1,703	87	5.1

[1] Excluding unemployment compensation taxes. [2] Estimated from data in *Colorado Year Book.*

Source: *State Tax Collections*, Bureau of the Census.

Consequently, if the cost of state government and state functions is related to the rising price level and to the increase of income of the people of the state, what at first appears to be an alarmingly large increase of taxes and of governmental costs, upon closer examination and considered upon a relative basis, becomes a small increase for the whole twenty-year period.

A second explanation of rising state tax collections for the past two decades is that new functions have been assumed by the state. The most important of these new functions was the introduction in 1935 (greatly expanded in 1936) of a public-welfare system providing for old age pensions and for general public assistance to needy unemployables of the state. In referring to the cost of this public-welfare

function, the writer is not intending to criticize or to disparage the function, but rather merely to indicate why taxes have increased. By 1949, the sales, use, and liquor tax receipts earmarked for old age pensions and other public assistance were yielding annually about $31 million. Thus this welfare function, initiated since 1930, was costing the people of the state by 1949 a sum double the entire amount of state tax collections at the beginning of the twenty-year period. Moreover, this $31 million current cost represents more than one third of the total current (1949) state tax collections.

If we deduct the cost to the state of old age pensions from total state tax collections for each year during the twenty-year period, and then relate the remainder to income payments, the ratios obtained do not indicate a relative upward trend of general governmental costs. These ratios for selected years may be seen in the accompanying table.

STATE TAX COLLECTIONS, LESS TAXES FOR OLD AGE PENSIONS, EXPRESSED AS RATIOS OF TOTAL INCOME PAYMENTS IN COLORADO, SELECTED YEARS, 1930–1948

Year	Percentage	Year	Percentage
1930	2.6	1940	4.2
1932	3.6	1942	2.8
1934	3.2	1944	2.4
1936	3.9	1946	2.4
1938	4.0	1948	3.0

Sources: Colorado State Department of Revenue and Colorado State Department of Public Welfare.

A third principal explanation of the upward trend of state taxes is that during recent years the state has been developing a program of extending grants-in-aid for certain functions previously financed solely or principally by local units of government. This trend in Colorado has been in accordance with a trend throughout the nation. State governments generally have been assuming increasing financial responsibility for support of such functions as public education, highways, health, and public welfare. Of course, to the extent that the state makes contributions or grants-in-aid to local units of government, the local units are relieved of financial burdens. Consequently, this trend toward more state aid, although causing state taxes to increase, either makes possible the reduction of local taxes or else permits a better performance of governmental services than was previously possible.

An adjoining table indicates changes in the amount of state taxes as compared with total state and local taxes which occurred from 1932 to 1942 among the forty-

eight states. As the Federal census of local finances is taken by ten-year intervals only, comparable figures are not available for years since 1942.

The states are listed in the table according to decreasing state tax percentages for the year 1942. It may be noted that, although there is a fairly high correlation

STATE TAXES EXPRESSED AS A PERCENTAGE OF TOTAL STATE AND LOCAL TAXES, BY STATES, 1932 AND 1942

Rank 1942	State	Percentage 1942	Percentage 1932	Rank 1942	State	Percentage 1942	Percentage 1932
1	Arkansas	75.9	46.0	25	Oregon	52.2	34.9
2	New Mexico	75.0	46.3	26	Maryland	52.0	32.1
3	Delaware	74.3	53.5	27	Maine	51.5	40.3
4	Arizona	71.8	31.1	28	Texas	51.3	36.7
5	North Carolina	70.8	35.7	29	Missouri	51.2	28.0
6	Washington	70.2	27.9	30	Wisconsin	51.2	25.4
7	Louisiana	69.6	33.5	31	Rhode Island	50.6	28.5
8	West Virginia	69.2	31.5	32	Minnesota	50.1	27.9
9	Alabama	68.5	37.8	33	COLORADO	50.1	25.8
10	Oklahoma	65.6	34.1	34	Iowa	49.2	22.4
11	South Carolina	65.5	40.5	35	Connecticut	49.1	29.2
12	Georgia	63.6	40.4	36	Wyoming	49.0	43.0
13	Virginia	62.4	39.7	37	Nevada	48.3	39.2
14	Kentucky	61.6	40.1	38	Illinois	47.4	15.9
15	Mississippi	60.3	27.9	39	Idaho	46.6	31.5
16	Utah	59.1	41.0	40	New Hampshire	46.2	30.0
17	Ohio	59.1	17.4	41	Kansas	45.3	25.5
18	Michigan	57.5	23.0	42	North Dakota	43.6	35.6
19	California	56.8	18.8	43	Massachusetts	42.2	19.3
20	Tennessee	56.3	33.3	44	New York	42.0	18.5
21	Florida	55.3	24.3	45	New Jersey	40.7	21.6
22	Vermont	54.6	43.5	46	Montana	40.1	32.0
23	Indiana	54.5	26.4	47	Nebraska	37.6	26.7
24	Pennsylvania	53.4	27.1	48	South Dakota	37.4	33.3
					AVERAGE	51.8	24.9

Source: *Financial Statistics of State and Local Governments*, 1932, 1942, Bureau of the Census.

between the order of states in 1932 and 1942, certain states changed drastically their relative positions. Colorado's position remained rather constant. In 1932 state taxes accounted for 25.8 per cent of all the taxes (excluding Federal) collected within the state, which placed Colorado thirty-seventh among the forty-eight states. By 1942 state tax collections had increased to 50.1 per cent of the total. However, because the trend had been upward for all states, Colorado's relative position changed but little, rising from thirty-seventh to thirty-third place.

Thus, although during the last twenty years Colorado's state government has lagged somewhat behind the average in the national trend toward increasing state aid for local governmental functions, a sufficient increase has occurred to account for a considerable proportion of the growth of total state expenditures. For example, in 1930 the state was appropriating nothing from tax sources for aid to public schools. However, by the fiscal year 1949 appropriations from the general fund were being made for this purpose at the annual rate of $9 million.

COLORADO STATE TAX REVENUE
(Fiscal years)

		Percentage of total
1930		
Highway Taxes	$6,837,000	44.8
General Property Tax	5,888,000	38.6
Inheritance Tax	900,000	5.9
Miscellaneous Taxes	1,642,000	10.7
TOTAL	$15,267,000	100.0
1949		
Highway Taxes[1]	$28,787,000	32.8
Sales and Use Taxes	25,799,000	29.5
Income Tax	17,065,000	19.4
Property Tax[2]	6,537,000	7.5
Liquor Taxes	4,446,000	5.1
Inheritance and Gift Taxes	1,911,000	2.2
Insurance Company Tax	1,877,000	2.1
Miscellaneous Taxes	1,209,000	1.4
TOTAL	$87,630,000	100.0

[1] Includes motor fuel, motor vehicle license and certificate of title fees, operators' and chauffeurs' licenses and public utility carriers taxes. [2] Includes specific ownership tax on motor vehicles.

Sources: *Colorado Year Book*, 1930 and files (1950) of the State Department of Revenue.

Even so, this $9 million represented an amount considerably below the proportion considered by educational authorities to be satisfactory in order to maintain acceptable educational standards throughout the state. Consequently, we may expect the trend toward more state aid for elementary and secondary schools to continue in the future.

THE 1949 TAX STRUCTURE COMPARED WITH THAT IN 1930

The preceding table compares Colorado state tax collections in 1949 with those in 1930 from standpoints both of amount and sources of revenue. It may

be seen that highway taxes headed the list in both years, accounting for nearly 45 per cent of all taxes in 1930; by 1949, this ratio had declined to about 33 per cent of total taxes, although the actual amount increased from $6,837,000 to $28,787,000 between 1930 and 1949. The general property and inheritance taxes were the only other important sources of state revenue in 1930. They accounted for 38.6 per cent and 5.9 per cent of total revenue, respectively. Collections remained fairly constant during the twenty-year period for these two taxes. However, the ratios declined to 7.5 per cent for the property tax and 2.2 per cent for the inheritance tax. The 1949 state tax structure included a number of important new taxes which were not being utilized in 1930. They were (1) the sales and use taxes, $25,799,000 or 29.5 per cent of total revenue; (2) the income tax, $17,065,000 or 19.4 per cent of total revenue; and (3) the family of liquor taxes, $4,446,000 or 5.1 per cent of total revenue.

These changes in the tax structure may be analyzed from the viewpoint of whether there was a trend during the two decades toward more or less indirect tax collections. This question is significant in that indirect taxes (often referred to as being regressive) tend to place the tax burden principally upon the low-income groups.

In 1930 about 45 per cent of total collections (the property and inheritance taxes) were in the form of direct taxes. However, by 1949, in spite of the adoption of an income tax, only 30 per cent of total collections were in the form of direct taxes. Thus, by the end of the period, about 70 per cent of the state's revenues were indirect, "hidden", or consumption taxes. This situation should be kept in mind if in the future an attempt is made to modify the existing income tax by returning to the earlier low rates and liberal exemptions. At present the income tax is the one important revenue source which keeps the state's tax system from being extremely regressive.

A fair index of the state's ability to support governmental functions, as well as an index of its actual performance, may be obtained by relating tax collections to income payments to individuals. This we have done for all forty-eight states in the chart which follows.

It may be seen that in 1949 state tax collections expressed as a percentage of income payments to individuals (1948) ranged from a high of 8.5 per cent in Louisiana to a low of 2 per cent in New Jersey. Colorado's ratio of 4.9 per cent was twelfth from the highest. However, as there was a large clustering of states within the range of 3.5 and 5.0 per cent (twenty-two states), Colorado's ratio of 4.9 differed very little from the median state's ratio of 4.0 per cent.

Louisiana	8.5
New Mexico	6.4
Arizona	6.3
Oklahoma	6.1
North Carolina	6.0
Washington	5.5
South Carolina	5.5
Mississippi	5.4
Utah	5.2
Florida	5.0
Arkansas	4.9
COLORADO	4.9
West Virginia	4.7
Oregon	4.6
Tennessee	4.6
California	4.4
Alabama	4.2
North Dakota	4.2
Kansas	4.1
Michigan	4.1
Minnesota	4.1
Vermont	4.1
Idaho	4.0
Wisconsin	4.0
Kentucky	3.9
Virginia	3.9
Maryland	3.8
Wyoming	3.8
Iowa	3.6
Maine	3.6
Georgia	3.5
Texas	3.5
Rhode Island	3.4
Indiana	3.3
Nevada	3.3
Massachusetts	3.2
South Dakota	3.2
Delaware	3.0
New Hampshire	3.0
Ohio	3.0
Missouri	2.9
Pennsylvania	2.9
Connecticut	2.8
Montana	2.8
New York	2.7
Illinois	2.5
Nebraska	2.3
New Jersey	2.0

State Tax Collections (1949) Expressed as Percentage of Income Payments to Individuals (1948)

Source: Bureau of the Census, *Sources of State Tax Revenue 1949*

CHAPTER II

THE PROPERTY TAX

FISCAL IMPORTANCE

The general property (ad valorem) tax has always been the principal source of revenue for state and local units of government in Colorado. Moreover, this arrangement prevails generally throughout the nation. For the country as a whole, in 1942 the property tax accounted for 47.3 per cent of all state and local tax revenue.[1] Thus, from the fiscal standpoint, the tax was nearly as important as all other sources combined.

If local units are considered separately, the property-tax percentage is extremely high. In 1942 all local units of government (county, city, town, village, and school district)received 93 per cent of their combined tax support in the form of the property tax. In Colorado the ratio was 96.2 per cent. There is reason to believe that this percentage for local units is substantially the same today as it was in 1942.

However, if state governments are separately considered (apart from local units) the relative importance of the property tax is very much less and has been declining. In 1932 the ratio was 19.7 per cent; by 1942 it had declined to 5.4 per cent, while by 1949 the percentage of total taxes collected in the form of the property tax was only 3.8 per cent. However, this 3.8 per cent merely represented a total or average proportion among the states. As might be expected, there was considerable deviation from this average. As the accompanying table shows, in 1949 over 31 per cent of Nebraska's state government tax revenue still came from the property tax. At the other extreme were twelve states receiving less than one per cent, while four of these received no property tax revenue at all. Colorado's 7.6 per cent represented a ratio somewhat higher than that of the average state.

DECLINING SIGNIFICANCE FOR STATE PURPOSES

A better understanding of changes which have occurred in Colorado relative to the property tax may be obtained from an examination of the table showing distribution of Colorado tax revenue for selected years, 1915 to 1949. Total yield of the tax increased from $2.6 million in 1915 to $5.5 million by 1920. Then a plateau prevailed until the depression of the thirties. Revenue dipped to $3.2 million in 1935, then climbed back slowly until the postwar years, when increases became more rapid. By 1949 the property tax yield of $6.1 million represented an increase

[1] *Revised Summary of State and Local Government Finances, 1942,* Bureau of the Census. This particular census is taken at ten-year intervals. Consequently, the next census will not be until 1952.

ORDER OF STATES ACCORDING TO PERCENTAGE OF TOTAL STATE TAXES COLLECTED IN THE FORM OF THE PROPERTY TAX, 1949

Rank	State	Percentage Property Tax to Total Rev.	Rank	State	Percentage Property Tax to Total Rev.
1	Nebraska	31.1	25	Ohio	4.6
2	Nevada	19.9	26	North Dakota	3.8
3	Utah	16.4	27	Florida	3.6
4	Maine	14.3	28	Missouri	3.6
5	Arizona	12.0	29	Maryland	3.4
6	Texas	10.3	30	Arkansas	2.7
7	Wisconsin	9.1	31	South Carolina	2.4
8	Kentucky	8.3	32	North Carolina	2.0
9	Colorado	7.6	33	Vermont	1.8
10	Idaho	7.6	34	Kansas	1.2
11	New Mexico	7.3	35	Mississippi	1.2
12	Montana	7.1	36	Tennessee	1.2
13	Virginia	6.7	37	South Dakota	.8
14	Alabama	6.4	38	Pennsylvania	.4
15	Georgia	6.2	39	Connecticut	.4
16	Wyoming	6.1	40	New York	.2
17	New Jersey	6.0	41	West Virginia	.2
18	Michigan	5.9	42	Iowa	.1
19	New Hampshire	5.8	43	Illinois	.04
20	Indiana	5.5	44	Massachusetts	.03
21	Minnesota	5.3	45	Delaware	—
22	Washington	5.1	46	Oklahoma	—
23	California	4.9	47	Oregon	—
24	Louisiana	4.7	48	Rhode Island	—
				AVERAGE	3.8

Source: *State Tax Collections, 1949,* Bureau of the Census.

DISTRIBUTION OF COLORADO PROPERTY TAX REVENUE FOR SELECTED YEARS, 1915 TO 1949

(Dollar Amounts in Thousands)

Year	State		County		City & Town		Public Schools		Total
	Amount	Per Cent	Amount	Per Cent	Amount	Per Cent	Amount	Per Cent	
1915	$2,607	13	$7,161	35	$5,300	26	$5,466	26	$20,536
1920	5,529	14	11,322	29	7,805	20	14,766	37	39,424
1925	5,726	13	9,459	21	8,756	19	21,248	47	45,190
1930	5,710	12	10,088	20	9,353	19	24,054	49	49,206
1935	3,268	9	7,685	21	7,753	21	18,254	49	36,961
1940	4,842	11	7,108	17	10,336	25	19,422	47	41,709
1945	4,267	9	10,164	22	10,121	21	22,660	48	47,213
1949	6,145	8	18,628	24	13,979	18	39,355	50	78,108

Source: *Annual Reports,* Colorado Tax Commission.

over collections of the twenties by about 10 per cent. Expressed as a percentage of total property-tax revenue, the state's share declined from 13 per cent in 1915 to 8 per cent by 1949. However, considering all factors and in comparison with other forms of revenue, especially since 1920, the aggregate yield of the property tax has been remarkably stable and dependable. The table also indicates that since 1915 there has been an upward trend in property-tax revenue going to school

STATE MILL LEVY AND AVERAGE TOTAL MILL LEVY FOR ALL LOCAL GOVERNMENTAL UNITS IN COLORADO, BY YEARS, 1920–1949

Year	State only	Average for local units[1]	Year	State only	Average for local units[1]
1920	3.47	21.33	1935	3.00	31.00
1921	4.35	22.45	1936	3.00	31.60
1922	4.48	22.62	1937	4.50	32.20
1923	3.93	23.47	1938	4.50	32.20
1924	3.70	24.20	1939	4.40	33.30
1925	3.70	25.60	1940	4.35	33.15
1926	3.67	26.23	1941	4.25	32.95
1927	3.84	26.76	1942	4.00	32.00
1928	3.56	27.04	1943	3.85	31.95
1929	3.66	27.64	1944	3.64	32.46
1930	3.59	27.41	1945	3.50	35.20
1931	3.49	27.71	1946	3.42	38.08
1932	3.49	27.71	1947	4.53	41.77
1933	3.40	30.10	1948	4.00	43.60
1934	3.40	30.10	1949	3.86	45.14

[1] Obtained by dividing total county, city or town, and school district anticipated revenue by total assessed valuation. Source: *Annual Reports*, Colorado Tax Commission.

districts—both in dollars and percentage-wise—while the other levels of government have experienced a downward relative trend in property-tax revenue.

Perhaps a fair appreciation of the declining relative property-tax role for the state government can be obtained by referring to the accompanying table showing mill levies by years since 1920. During the twenty-five-year period the mill levy for state purposes has varied but slightly, ranging from a low of 3 mills in 1935 and 1936 to a high of 4.53 mills in 1947. The rate of 3.86 in 1949 was fairly typical of rates during the twenties. On the other hand, the average mill levy for local units of government has steadily risen since 1920. The 45.14 mills in 1949 was more than double the mill levy at the beginning of the period. Thus over the years, the two sets of figures (state mill levies and levies for local units) have steadily become farther and farther apart.

None of the revenue obtained from the state's 3.86 mill levy in 1949 was allocated to the general fund. In other words, property-tax revenue (see accompanying table), on the level of the state, was confined to special purposes only.

Colorado's constitution limits the amount of property tax which may be levied by the state government. A constitutional amendment of 1892 fixed the maximum rate for state purposes at 4 mills. Another amendment in 1920 permitted the levying of one additional mill for the erection of buildings for state educational institutions Thus, present restrictions limit the total tax rate on property for all state purposes to a maximum of 5 mills on each dollar of assessed valuation.[2]

1949 COLORADO STATE MILL LEVIES—SPECIAL PURPOSES

	Mill levy	Anticipated revenue
General fund	—	—
Educational Institutions	1.58741	$2,526,868
Eleemosynary Institutions	.40844	650,162
Building program	1.52862	2,432,285
Police pensions	.20000	318,363
State military	.07000	111,427
Stock inspection	.03333	53,055
State Fair tax	.30000	47,754
Interest on debt	.00220	3,502
TOTAL	3.86000	$6,144,417

Source: *Annual Report*, 1949, Colorado Tax Commission.

SHOULD THE STATE MILL LEVY BE ELIMINATED?

The general trend toward placing less emphasis upon the property tax for state purposes has culminated in the complete abandonment of this form of state revenue in a number of jurisdictions. In 1949 four states (Delaware, Oklahoma, Oregon, and Rhode Island) applied no mill levy for state purposes. Moreover, twenty states applied the levy only on specific types of property, the most common examples being upon motor vehicles, intangibles, railroads, and public utilities.[3] Thus today one half of the American states limit rather drastically the extent to which they utilize the property tax for state purposes (four of these having abandoned the tax entirely).

Does this trend represent genuine tax reform? If so, what are the advantages to be achieved? Are there possible reasons why a complete withdrawal by the state government from the property-tax field is not desirable? Let us consider the various aspects of this issue.

[2] Colorado Constitution, Article 10, Section 11.

[3] These states were California, Connecticut, Florida, Illinois, Iowa, Massachusetts, Michigan, New Hampshire, New Jersey, New York, North Carolina, Ohio, Pennsylvania, South Carolina, South Dakota, Tennessee, Vermont, Virginia, Washington, and Wisconsin. See *Sources of State Tax Revenue in 1949*, Bureau of the Census.

ARGUMENTS PRO AND CON

In the first place, it may be argued that the property tax has been overworked and that, as a consequence, today the property owner is taxed too much. This opinion leads to the contention that if the state withdraws from the property-tax field, tax relief will be provided the property owner. This perhaps is the most telling argument which can be brought forth in favor of abandonment of the tax by the state. Unquestionably, in the American economy, the property tax has often been pushed too far by state and local governments. In the process, intangible wealth has generally escaped the tax entirely; and this fact has placed the burden principally upon owners of real property.[4] However, this apparently heavy real-property tax burden is not uniformly heavy throughout the various communities and counties of Colorado. Neither is it uniformly heavy for all property owners within the same tax district. Moreover, the burden, where it exists, is not significantly due to the state's mill levy. In other words, the 3.86 mills (1949) levied by the Colorado state government represented a very minor portion of the total mill levy in most communities throughout the state. For example, in the city of Pueblo, where the total property-tax levy was about 84 mills, the state's share of the tax (3.86 mills) was only between 4 and 5 per cent of the total. If all communities in the state are considered together, abandonment of the 3.86 mills would have reduced the average property-tax by about 7 per cent.

Thus, where the property tax is excessive, a solution is probably to be found in measures other than the withdrawal from the tax by the state government. Probably what is needed is better equalization of property assessments together with a reduction of local mill levies in the poorer communities. This reduction would be possible if the state were to extend more aid for necessary functions of local government, the most important being public education.

A second argument in favor of abandonment of the state mill levy is related to the first argument. It is contended that local units of government require all the revenue which they can obtain from the property tax. Consequently, they should not be subjected in this tax field to competition from the state. It is pointed out that while the state may draw upon such revenue sources as the general sales, gasoline, income, and inheritance taxes, local units are forced to depend primarily, if not solely, upon the property tax.

Perhaps there is some merit in this second argument. Local units often are hard pressed to obtain sufficient revenue, while many of the smaller and poorer districts of the state have no source of revenue other than the property tax. However, if these poorer districts are to receive assistance through a state equalization program, the state probably requires a moderate property-tax mill levy if revenue is

[4] Recognition of the difficulty of assessing intangibles led to a constitutional amendment in Colorado in 1936 exempting intangible property from the ad valorem tax.

to be stable enough both to provide support for state institutions and to finance the required grants to local units. This may especially be true in Colorado, where so much of the state revenue is earmarked for special purposes. The sales, use, and liquor tax receipts go for old age pensions and for general relief to the unemployables of the state. The gasoline and motor vehicle license taxes are earmarked for highways. The inheritance tax never can be expected to yield a very large proportion of revenue. This leaves the income and property taxes as the principal sources of state revenue to support the various state institutions, to finance the general state government, and to provide state aid for the public schools. Although the income tax is a fair and generally excellent revenue measure which currently is yielding a surprisingly large amount of revenue, it cannot be relied upon to maintain its productivity during depression years. Consequently, the property tax will probably always be required in Colorado, especially for "standby" purposes, in order to assure a sufficient stability of revenue for essential functions of government.

A third and frequently mentioned argument for withdrawal of the state from the property-tax field is that such action would bring improvement in property assessments. This argument is based upon the assumption that the current cause for poor assessments is, principally, competitive underassessments, consciously made by each county assessor in order to reduce, in each case, his county's share of the state's tax. In other words, it is argued that if there were no state property tax, jealousy and suspicion among the counties would disappear relative to the level of property assessments. Consequently, each assessor would be much more likely to make full, fair, and equal assessments. Moreover, it is contended that, should assessments for some reason continue to be unequal as among the various counties, no great harm would be done, as all of the revenue received, in each case, would be retained within the county from which collections were made.

Some of these arguments relative to the property-tax assessment problem appear plausible. However, in those jurisdictions where the state government has withdrawn from the property-tax field, in order to make possible an improvement of assessments, there has been disappointment in the results. Apparently there are far more significant reasons for poor assessments than the desire to escape the burden of a state mill levy—particularly when this mill levy represents only a small fraction of the total property-tax load.

As states have discontinued the utilization of mill levies for state purposes, there has been an accompanying relaxation of state supervision over assessments. Thus, local assessors, being required to rely largely upon their own resources, have, even to a greater extent than previously, tended to "give way" to local pressures. Thus inequality of assessments, as among individual taxpayers, has usually increased rather than diminished. The need for this kind of equality (among

individuals within the same district) exists whether the state takes any revenue or not. Moreover, there still remains need for equality among the counties, especially in states such as Colorado, for public utilities are assessed as a unit by state authorities. Without some degree of county uniformity, there is little likelihood of assessment equality among the farms, mines, industrial and commercial enterprises, and homes, on the one hand, and public utilities, on the other hand. An additional important reason why state-wide uniformity of assessments in Colorado is vital is that state aid to the public schools is largely based upon tax rates of the various school districts. If permitted to do so, by reducing assessments and raising mill levies, a school district or county might thereby, without actually changing the amount of its property taxes, receive more school aid from the state than previously.

Thus a solution to the property-tax assessment problem is probably not to be found in the state's abandonment of its mill levy, but rather in the development of a system assuring a better selection of county assessors with longer terms of office, together with more effective central supervision and equalization of assessments throughout the state.

Considering all factors, the writer believes that the wiser course of action for Colorado will be to retain state mill levies, keeping them to a minimum consistent with revenue-stability requirements, since depression periods are likely to occur again. This policy means that, although major reliance should be placed upon the income tax, the ad valorem mill levy for state purposes should not be completely abandoned.

THE REAPPRAISAL PROGRAM

In 1947, the Colorado General Assembly authorized a complete, state-wide reappraisal of all real estate for tax purposes. To assist the Tax Commission with this program $100,000 was initially appropriated, this amount being supplemented two years later by $113,834 more. The various counties of the state co-operated by appropriating funds to employ the necessary reappraisal field crews, working under the immediate supervision of the county assessors.

There is present expectation that all reappraisals will be completed by June 30, 1951, in sufficient time to permit placing the state upon the new valuation basis for the 1951 taxes payable in 1952.

This state-wide reappraisal has been a crying need in Colorado for many years. Prior to 1947 the Tax Commission had repeatedly requested appropriations sufficient to carry on the work, but to no avail. However, Governor Lee Knous, as well as various members of the Thirty-Sixth General Assembly, became interested in sponsoring the reform. Considerable investigation had previously been made to determine the true state of affairs relative to property assessments.

The findings indicated conclusively that property assessments upon a uniform basis throughout the state were urgently needed.[5]

The Tax Commission has decided to place the new assessments upon a 1941 prewar price-level basis. Thus, in terms of actual current values, real estate will be assessed upon a fractional basis only. The writer has always contended that fractional assessments, in effect, are not as much in the interest of taxpayers or of all the people of the state as are full assessments.[6] When the fraction is to be based upon values as remote as those of the prewar years, there is even greater danger that the full advantage of uniform reappraisals may not be achieved. This point of view is borne out by a recent committee report of the National Association of Assessing Officers at a meeting held February 18, 1950, in Chicago. Relative to the problem, the committee agreed upon the following points:

1. There no longer exists any justification for using the prewar price level as a basis for present day assessed values.
2. Where such a level is employed, it is nearly impossible to achieve equality between different types of property and between property constructed prior to World War II and that constructed since the war ended.
3. All available evidence indicates that, except in the event of economic changes of catastrophic proportions, the nation's economy will never return to the prewar level, and accordingly, that level is no longer of any use as a valuation standard and should be totally abandoned by assessing officers everywhere.
4. The prime function of the assessing officer is to reveal accurately and completely the taxable resources of the community or jurisdiction which he serves, and such objective is impossible to attain so long as a completely unrealistic standard like the prewar price level is being used.
5. The failure of many assessing officers to employ a realistic price level has resulted in unrealistic tax rates and false pictures of financial stability of their jurisdictions.

Undoubtedly in Colorado, even though prewar prices and costs are to be used in fixing reappraisal values, considerable property-tax improvement from the standpoint of equity or fairness to taxpayers throughout the state will be achieved. However, in order better to assure a continuation of this improvement in the state, an adequate research and field staff should be maintained by the State Tax Commission so that effective and continuous supervision may be exercised.

[5] See Earl C. Crockett, *The Colorado Property Tax*, 1947, University of Colorado, Boulder, Colorado.
[6] *Ibid.*, pp. 59–61.

CHAPTER III

THE SEVERANCE-TAX ISSUE

For a number of years the state of Colorado has considered the adoption of a severance tax upon oil.[1] In the General Assembly of 1947 and again in 1949 severance-tax bills, backed by Governor Lee Knous, received considerable support from many members of the legislature. However, in each session the tax bill, having passed the House, was defeated by a narrow margin in the Senate. There is a strong probability that once again, in 1951, the General Assembly will reconsider the enactment of an oil severance tax.

OIL PRODUCTION IN THE STATE

A principal factor stimulating interest in the support of an oil-production or severance tax has been the almost phenomenal rate of discovery and exploitation of new oil resources in the state during recent years. The accompanying table shows the amount of Colorado oil production from 1862 to 1939 and by years since 1939. Estimated proved oil reserves by years since 1940 are also given in

PETROLEUM PRODUCTION AND PROVED OIL RESERVES IN COLORADO

(Barrels)

Year	Production	Estimated proved oil reserves
1862–1939	38,048,000	
1940	1,626,000	18,000,000
1941	2,150,000	23,000,000
1942	2,199,000	39,000,000
1943	2,320,000	45,000,000
1944	2,944,000	89,000,000
1945	4,959,000	260,000,000
1946	11,856,000	300,000,000
1947	15,748,000	382,000,000
1948[1]	17,754,000	314,500,000
1949[1]	23,406,000	271,000,000

Source: *Minerals Year Book*, 1947, Bureau of Mines. [1] *Oil and Gas Journal*, January 26,1950.

the table. It may be seen that oil production during the decade 1940–1949 increased from 1,626,000 barrels in 1940 to 23,406,000 barrels in 1949. Estimated proved oil reserves increased from 18,000,000 barrels at the beginning of the dec-

[1] For a more complete discussion of the severance tax the writer wishes to refer the reader to his monograph entitled *Should Colorado Adopt a Severance Tax?*, 1946, University of Colorado; also "Some Policy Questions Relating to the Taxation of Mineral Resources," *Proceedings of the National Tax Association*, 1948, pp. 223–230.

ade to a peak of 382,000,000 barrels in 1947. Since then, estimated reserves have declined to 271,000,000 barrels.

As a result of these developments during the forties, Colorado has become an important oil-producing state. Although production is still, and probably always will be, far behind that in states such as Texas and California, Colorado now ranks eleventh among the states of the Union. The table gives figures for the top twenty states in crude-oil production in 1949. If Colorado's production continues at the

LEADING STATES IN PETROLEUM PRODUCTION, 1949
(Thousands of barrels)

Rank	State	Production	Rank	State	Production
1	Texas	746,244	11	COLORADO	23,406
2	California	334,484	12	Michigan	16,447
3	Louisiana	191,409	13	Pennsylvania	11,379
4	Oklahoma	150,003	14	Indiana	9,745
5	Kansas	100,139	15	Montana	9,265
6	Illinois	64,086	16	Kentucky	8,687
7	New Mexico	48,013	17	New York	4,342
8	Wyoming	47,467	18	Ohio	3,426
9	Mississippi	38,066	19	West Virginia	2,830
10	Arkansas	29,420	20	Florida	457
				Other States	1,473
				TOTAL	1,840,688

Source: *Oil and Gas Journal*, January 26, 1950.

1949 rate, on the basis of present proved oil reserves, her supply will last about ten to twelve years. However, in the future, additional oil reserves are very likely to be discovered.

SEVERANCE TAXES IN OTHER STATES

Among the ten leading oil-producing states, eight now apply severance taxes upon oil, while among the twenty leading states, fourteen have severance taxes. Because of a high degree of concentration of production in those states applying this form of tax, in 1949, 91.5 per cent of all crude oil produced in the country was taxed upon a severance basis. In other words, only 8.5 per cent of the total production escaped a severance tax. However, notably in California and Kansas, current production tax rates are very low.

Listed below are the oil-producing states; those which have severance taxes (1950) upon oil or natural gas are identified; also the tax rates which prevail in each case are summarized.[2]

[2] *State Tax Guide*, pp. 3501–3513, Commerce Clearing House. (Loose-leaf service.)

Alabama,	oil and natural gas, tax rate 6% of gross value.
Arkansas,	oil, tax rate 4% of gross plus $\frac{1}{2}$¢ per bbl.
California,	oil and natural gas, tax rate determined annually by Department of Natural Resources.
Colorado,	no severance tax.
Florida,	oil and natural gas, tax rate 5% of gross value.
Illinois,	no severance tax.
Indiana,	oil and natural gas, tax rate 1% of gross value.
Kansas,	oil, tax rate $\frac{1}{15}$¢ plus $\frac{1}{10}$¢ per bbl. natural gas, $\frac{5}{100}$¢ per 1000 cu. ft.
Kentucky,	oil, for state purposes, rate $\frac{1}{2}$ of 1% of gross value; counties may levy up to 1% of gross value.
Louisiana,	oil, 18¢ to 26¢ per bbl. depending upon specific gravity; natural gas, $\frac{3}{10}$¢ per 1000 cu. ft.
Michigan,	oil, tax rate 2% of gross plus $\frac{1}{8}$¢ per bbl. natural gas, 2% of gross value.
Mississippi,	oil, 6¢ per bbl. or 6% of gross whichever is greater; natural gas, $\frac{3}{10}$¢ per 1000 cu. ft. or 6% whichever is greater.
Montana,	oil, 2% of gross value plus $\frac{3}{8}$¢ per bbl.
New Mexico,	oil and natural gas, 2% of gross value.
New York,	no severance tax.
Ohio,	no severance tax.
Oklahoma,	oil, 5% of gross plus $\frac{1}{8}$¢ per bbl. natural gas, 5% of gross plus $\frac{2}{100}$¢ per 1000 cu. ft.
Pennsylvania,	no severance tax.
Texas,	oil, 4.125¢ per bbl. or 4.125% whichever is greater plus 10% of this basic rate (Mar. 1, 1950–Sept. 1, 1951) plus $\frac{3}{16}$¢ per bbl. natural gas, 5.2% of gross plus 10% of this basic rate (Mar. 1, 1950–Sept. 1, 1951).
West Virginia,	no severance tax.
Wyoming,	no severance tax.

The weighted arithmetic average tax rate for the above states possessing a severance tax is approximately 10 cents per barrel of crude oil.[3] As Colorado's production of oil in 1949 was 23,406,000 barrels, a 10-cents-per-barrel severance tax would have yielded about $2,340,000 of revenue.

Most states applying a severance tax also include minerals under their general property tax. In other words, the general rule is to apply both severance and ad valorem (property) taxes upon petroleum production and reserves. Alabama and Michigan are exceptions, for in these two jurisdictions products taxed under the severance levy are exempt from the ad valorem tax. Also, but to a limited degree only, Mississippi and Oklahoma allow some exemption. However, in these latter two states only oil-drilling rigs and machinery are exempt from the ad valorem tax.[4]

[3] This 10¢-per-barrel average was calculated by multiplying production in each state by the tax rate of the state; then the average tax per barrel was determined from these products. An average value of $2.50 per barrel of crude oil was assumed.

[4] *State Tax Guide*, 1950, Commerce Clearing House.

The courts have held that severance taxes in character are excise or occupation taxes rather than property taxes. Therefore, they are not subject to the constitutional restrictions applicable to property taxes. Neither do they constitute unconstitutional double taxation when levied in addition to ad valorem taxes.[5]

Moreover, states are permitted to tax the production of oil taken by a lessee from Federal public lands.[6]

ADVANTAGES OF THE SEVERANCE TAX

As a revenue measure the severance tax has a number of advantages as well as a few possible limitations. The advantages will first be summarized.

1. The tax has simplicity and ease of administration.

2. It presents few, if any, legal difficulties. For example, constitutional restrictions of the property tax do not apply; it may be levied in addition to the ad valorem tax, while expert legal opinion holds that in Colorado the revenue need not be taken by the pension fund.

The Colorado old-age-pension constitutional amendment (Article 24, Sec. 2) allocates to the fund, in addition to other monies, the following:

"(a) . . . eighty-five per cent of all net revenue . . . from any and all excise taxes now or hereafter levied upon sales at retail or any other purchase transaction; together with eighty-five per cent of the net revenue derived from any excise taxes now or hereafter levied upon the storage, use, or consumption of any commodity or product . . . ."

However, the courts have held that not *all* excise taxes may be claimed by the pension fund. The service tax was held to be excluded.[7] Also a severance tax is certainly not a sales tax, since it arises whether the producer or severer sells the article or not. Nor is it a tax "levied upon the storage, use, or consumption" of the article if it is levied upon the severance. "Severance" and "storage, use or consumption" are, of course, two entirely different matters. Consideration of the purpose fulfilled by the so-called "use" tax statute shows that it has no relationship to the process of severance.[8]

3. The tax is equitable in that collections are made only when oil wells are producing.

4. In contrast with the property tax, the severance levy ordinarily tends to promote conservation of mineral resources rather than rapid exploitation and depletion. Moreover, the tax can be adapted to any particular development or conservation policy of the state or nation.

[5] Oliver Iron Mining Co. v. Lord et al, 262 US 172 (1923); Swiss Oil Corp. v. Shanks, 272 US 409 (1927).

[6] Oklahoma Tax Comm. v. The Texas Co., 336 US 342 (1949).

[7] Rinn v. Bedford, 102 Colo. 475 and Conklin v. Armstrong, 106 Colo. 376.

[8] Both the Law School of the University of Colorado and the Colorado Education Association have prepared legal briefs expressing these points of view.

5. The state as a whole can benefit from severance-tax revenue, whereas under the property tax a few isolated communities are the sole or principal beneficiaries. For example, in Colorado the property-tax state mill levy is very low and may soon be reduced still further and possibly even abandoned.

6. Being a heritage of the state and an exhaustible natural resource, oil should be taxed in such a manner as to reimburse the state to some extent as the resource is being depleted. This principle is particularly significant when oil wells are operated largely by absentee owners or when much of the crude oil is exported directly from the state—both conditions being prevalent in Colorado. The severance method of taxation fits in with this "natural heritage" principle.

7. As more than 90 per cent of all oil produced in the nation comes from wells located in states applying a severance tax, the price of crude oil, uniform over wide market areas, tends to be established upon the basis of cost of production including the severance tax. Therefore, in those few states, including Colorado, which have no production or severance tax, the price of oil is probably as high as though there were such a tax. Thus, by not having the tax, a state not only deprives itself of public revenue but, in effect, tends to subsidize the oil industry. Should the price of oil be established upon the basis of general *average* costs including taxes in the several states, the effect of not having a tax in Colorado is to subsidize those states which do have the severance tax.

8. As compared with property taxes paid by various farmers, homeowners, and many industrial enterprises in Colorado, the oil industry is probably now favored. This situation exists partly because property assessments in the oil industry are based upon a percentage of annual production instead of the value of oil reserves, and partly because the oil is produced in sparsely populated areas of the state where mill levies tend to be low. Thus an oil severance tax, if applied in addition to existing property taxes, would in effect probably tend to equalize tax burdens rather than to discriminate or favor a certain group or groups.

9. Revenue obtainable from an oil severance tax can be utilized (a) to reduce the state property-tax mill levy, or (b) to support more adequately state institutions and functions of state government, or (c) to extend more state aid to the public schools.

LIMITATIONS OF THE SEVERANCE TAX

The oil severance tax probably possesses a number of weaknesses or limitations. Let us now consider these possible shortcomings.

1. Revenue may be somewhat unstable and unpredictable. This is because tax yields depend upon the rate of oil production. Consequently, local units of government cannot safely build their tax structure upon a severance-tax foundation. However, as a *state* revenue measure, the severance tax may not cause undue

difficulty through its lack of stability, since the state has a broad tax base with diversified resources.

2. The severance tax is always based upon either volume of output or gross revenue. Although superior to the property tax, neither basis is an entirely satisfactory measure of ability to pay taxes. Perhaps this difficulty can be largely avoided by allowing a lower tax rate per barrel of oil for marginal wells—those producing a small amount of oil per day. This practice, followed by Louisiana, probably increases the equity of the severance tax. However, unless tax rates are fairly heavy, a classification of oil wells is not desirable or necessary, as such classification increases the difficulty of tax administration.

3. The tax needs to be supplemented with some other method of taxation, because it does not apply to nonproducing wells and oil reserves. This limitation of the severance tax can be corrected by developing in a complementary manner both the severance and property taxes.

SHOULD A COLORADO SEVERANCE TAX BE CONFINED TO THE OIL INDUSTRY?

It may be pointed out that natural wealth includes such widely diverse resources as petroleum, coal, metals and other minerals, forest products, fisheries, agricultural lands, grazing lands, and water for irrigation, navigation, and power. At present these various resources are treated quite differently under existing tax laws. Even the property tax (based upon the principle that all property must be taxed uniformly) is not applied in the same manner to all natural resources. Some resources are assessed upon a true ad valorm basis while others are assessed upon a basis of net or gross return. Also, it is true that our various resources differ widely from the standpoint of whether, as they are developed or exploited, they are inevitably exhausted, whether they are temporarily depleted but may be renewed, or whether they may be constantly maintained upon a permanent basis.

Recognizing differences among natural resources from the viewpoint both of inevitable differences in methods of ad valorem taxation and of intrinsic differences relative to the permanency of resources, most states apply a severance tax merely to a selected list of products. As a matter of fact, the only states with comprehensive severance taxes are Arkansas, Louisiana, New Mexico, and Oklahoma. However, the taxes in these states are not applied to *all* natural resources, and the rates vary in each case among specific products.

It is a rather common practice among the states to single out oil and natural gas for severance taxation. This is the practice in Florida, Georgia, Indiana, Kansas, Kentucky, Michigan, North Carolina, and Tennessee. Texas applies the tax merely to oil, natural gas, sulphur, and carbon black. Consequently, a Colorado severance tax confined to the petroleum industry would appear to be proper. Such a tax would be in accordance with taxpaying ability. The oil industry is

expanding rapidly and is relatively prosperous. Moreover, our oil resources to a greater extent than other natural resources are being exploited and taken directly from the state.

In conclusion, the writer wishes to state that in view of all the factors involved, in his opinion, Colorado's tax structure would be considerably improved by the enactment of a state severance tax upon oil. The tax rate might well be 5 per cent of the gross value of crude oil. Resulting revenue—$2 to $3 million anually—could be used to reduce the state's mill levy upon all classes of property, to support more adequately the state's institutions and governmental functions, or to increase state aid to the public schools.

CHAPTER IV

THE GASOLINE TAX AND THE REFUND PROBLEM

UNDERLYING PHILOSOPHY OF THE GASOLINE TAX

In this country, perhaps to a greater extent than elsewhere, the gasoline tax developed in accordance with the assumption that the tax was justified solely, or at least largely, because of direct special benefits received back by the taxpayer.

This philosophy based upon the benefit principle guided a majority of American states as the motor-fuel tax developed within their respective jurisdictions. Application of the principle led to the adoption of two practices. In order to assure a direct relationship between payment of the tax and the receipt of benefits, it was considered advisable, first, to earmark the tax revenue for highway purposes and, secondly, to provide exemptions or refunds for gasoline not used upon the highways. This procedure, for a time at least, was defensible. In fact, the arrangement probably injected into the tax system a fair degree of justice. Tax rates were moderate while highways usually benefited motorists in a rather personal and localized manner. Thus no great violation of equity was likely or even possible relative to an application of the benefit doctrine. Rates being low, there was comparatively little incentive for tax evasion through the loophole of "non-highway" use. Moreover, highways had not as yet become arterial thoroughfares serving all members of a community in a vital manner whether they own and operate motor vehicles or not. Therefore, it was considered fair to tax motorists sufficiently to pay the entire cost of highways.

SUBSEQUENT DEVELOPMENT OF THE TAX

However, these basic conditions have changed. In most states the gasoline-tax rate has risen to such a level that the tax is now a very significant proportion of the

AVERAGE STATE GASOLINE TAX BY FIVE-YEAR PERIODS[1]
(1919–1949)

Year	Average Rate per Gallon	Year	Average Rate per Gallon
1919	1.0¢	1939	4.3¢
1924	2.1¢	1944	4.4¢
1929	3.7¢	1949	5.2¢
1934	4.1¢		

[1] The Federal and local gasoline taxes, if any, are not included in the calculations.

Source: Commerce Clearing House, *Tax Systems* (various editions indicated by years in the table).

total cost of motor fuel. The accompanying table indicates that the tax has increased since 1919 from an average rate of one cent per gallon to a present-day average of 5.2 cents per gallon.

By 1950, state gasoline-tax rates ranged from a low of 2 cents to a high of 9 cents per gallon of motor fuel. An accompanying table shows the number of states, including the District of Columbia, in each category of rates. It will be observed that most states, all except five, now apply taxes ranging from 4 cents to 7 cents per gallon. In addition to these rates, there is a Federal tax of 1½ cents per gallon while some municipalities in certain states also apply additional gasoline taxes.

Thus existing motor-fuel taxes account for at least 20 or 25 per cent of the consumer's price of gasoline. It is not surprising that consumers now wish to take full advantage of all exemption or refund privileges under the law. Neither is it surprising that many use these exemption and refund privileges as loopholes for evading taxes which should be paid. Particularly it is not surprising when one learns about the extreme difficulty of adequately administering exemption and refund provisions of any motor-fuel tax law.

GASOLINE-TAX RATES BY NUMBER OF STATES (1949)

Number of States	Tax per Gallon	Number of States	Tax per gallon
1	2 ¢	1	5½¢
3	3 ¢	11	6 ¢
14	4 ¢	3	6½¢
1	4½¢	6	7 ¢
8	5 ¢	1	9 ¢

Source: Commerce Clearing House, *State Tax Guide Service*, p. 1405.

THE TREND OF TAX REFUNDS

Indicative of the situation which has developed throughout the country among many of those states permitting exemptions and refunds is the trend in Colorado, where refunds both in the aggregate and percentage-wise have more or less constantly increased. A table which follows shows refunds expressed in dollars and also as percentages of gross receipts for selected years since 1920.

Refund figures are available for thirty-two of the thirty-seven states which permitted refunds in 1948. These figures expressed as percentages of gasoline-tax receipts are shown in an accompanying table. The range was from 45.6 per cent in North Dakota to one per cent in Georgia. Thus the states differed widely relative to the amounts of refunds permitted. Moreover, this variation among states cannot be explained on the basis of comparative amounts of gasoline actually purchased for non-highway use.

COLORADO GASOLINE-TAX RECEIPTS AND REFUNDS, SELECTED YEARS, 1920–49

Year	Gross Receipts	Refunds	Refunds as Percentage of Gross Receipts
1920	$ 510,009	$ 7,381	1.4
1925	1,874,408	30,537	1.6
1930	6,643,111	615,835	9.3
1935	6,814,610	805,070	11.8
1940	9,632,988	1,371,834	14.2
1945	9,256,039	1,675,564	15.9
1946	12,529,695	2,003,761	15.9
1947	19,417,710	3,090,024	15.9
1948	22,774,066	4,444,240	19.5
1949	23,819,973	4,248,722	17.8

Source: Colorado State Department of Revenue.

GASOLINE-TAX REFUNDS EXPRESSED AS PERCENTAGE OF GASOLINE-TAX RECEIPTS, BY STATES, 1948[1]

State	Percentage	State	Percentage
1 North Dakota	45.6	17 Maryland	8.1
2 Iowa	26.4	18 Michigan	8.0
3 Montana	26.4	19 Rhode Island	8.0
4 Colorado	19.5	20 Missouri	7.0
5 Minnesota	19.1	21 Virginia	7.0
6 Texas	17.1	22 Ohio	6.2
7 Oregon	12.8	23 Maine	5.8
8 Illinois	12.2	24 Massachusetts	5.4
9 Idaho	11.9	25 Nebraska	4.9
10 Wisconsin	11.9	26 Mississippi	3.4
11 New Mexico	11.4	27 North Carolina	3.0
12 Indiana	11.0	28 New Hampshire	2.7
13 New Jersey	10.5	29 Tennessee	2.1
14 Delaware	10.2	30 Connecticut	1.5
15 Arizona	9.7	31 South Carolina	1.5
16 Nevada	8.2	32 Georgia	1.0

[1] Information was not available for five additional states which permitted refunds in 1948; they were California, Kentucky, New York, South Dakota and Washington.

Source: Federation of Tax Administrators, *State Practices in Refunding Gasoline Taxes*, Research Report No. 25, August, 1949.

Total refunds for the year (1948) for all states amounted to $132.1 million. This was more than 10 per cent of gross collections. Also, approximately $2 million was required in administering the special provisions relating to state refund systems.

EXEMPTIONS AND REFUNDS ACCORDING TO PURPOSE

The states differ widely not only according to the amount of refunds permitted but also according to the various purposes for which exemptions and refunds are legally recognized. It is customary to exempt gasoline from the tax if it is being exported from the state. Also, exemptions or refunds are commonly given for motor fuel purchased by the Federal government. In addition, but much less frequently, state agencies and municipal units of government are sometimes excused from payment of the tax. Finally, there are refunds to purchasers of gasoline who use the fuel for non-highway purposes. These non-highway purposes, for those states permitting them, may be classified in their approximate order of importance as follows:

1. Agriculture
2. Industries
3. Contracting and construction
4. Aviation
5. Railroads and boats
6. Power generating machines.

In Colorado refunds are permitted for (1) motor fuel lost or destroyed by fire, lightning, flood, tornado, windstorm, accident, or explosion; (2) motor fuel purchased and used by the United States government; (3) motor fuel purchased and used by Colorado state agencies and political subdivisions of the state in the construction, improvement, repair, or maintenance of streets or other public highways;[1] and (4) motor fuel purchased and used for various non-highway purposes.[2] A 1949 classification of Colorado refunds indicates the following percentage distribution according to major purpose:[3]

	Per Cent
Agriculture	72.18
Aviation	12.52
Governmental	9.13
Other non-highway	6.17
	100.00

In most states agricultural refunds exceed refunds for all other purposes combined, while in some farming states they account for more than 90 per cent of all refunds.

[1] Through a recent administrative ruling, exemptions for this purpose are now possible and consequently have largely replaced the granting of refunds.

[2] *Motor Fuel Tax Law and Rules and Regulations*, 1947, Department of Revenue.

[3] Colorado State Department of Revenue.

REFUND ADMINISTRATIVE DIFFICULTIES

The difficulty of administering exemption and refund provisions of gasoline-tax laws has long been recognized. The problem encountered is to discover devices and technics which will eliminate, or at least minimize, the possibility of tax evasion. Because satisfactory administration of a system of *exemptions* as contrasted with *refunds* is quite impossible, states have almost entirely abandoned the practice of giving exemptions except perhaps for purposes of exportation of gasoline from the state and sometimes for sales to governmental bodies. Presumably the last state (Kansas) which had permitted exemptions for agricultural non-highway purposes changed to the refund system in January, 1950.

When the refund method is employed—the system now almost universal—the motor-fuel user is required to pay the tax at the time of purchase but later applies for the return of his tax payment. This procedure facilitates to some extent the possibility of deterring evasion and of detecting fraud when it does occur.

Special administrative devices in connection with the granting of refunds, althought not uniformly utilized by all states, include the following:

1. Licensing of the dealers which are permitted to sell refund gasoline.
2. Licensing of users of refund gasoline.
3. Special application and invoice requirements.
4. Limitation of time allowed for filing claims.
5. Minimum amount and maximum number of claims requirement.
6. Requirement of oath or signature of witness on claims.
7. Regulation of extent to which dealer may assist an applicant in filing his claim.
8. Coloring of refund gasoline.
9. Provision for penalties, often severe, for violation of the law.

Although most, if not all, of these devices assist a revenue department, each possesses definite shortcomings; and all of the methods combined cannot prevent refunds from becoming a loophole for tax evasion when dealers and gasoline users collude, as apparently happens all too frequently. Limitations of space in this article prevent an elaboration of the various administrative difficulties as they relate to the above-named devices. However, an illustration or two may be given.

If, among gasoline dealers, the general attitude has developed that misuse of the refund privilege is not the dealer's responsibility; if each dealer believes that his competitors generally shut their eyes to customer tax evasion and that, consequently, he must likewise do so; also, if the customer's attitude toward the practice of diverting tax-refunded gasoline from a legitimate use to a vehicle operated upon the highway has become "conditioned" by observing this evasion being constantly practiced by his neighbors; there is little assurance that invoices will be accurate or that a claimant's application will be honestly prepared. Likewise, under these conditions it may be largely futile to ask dealers to color gas-

oline by applying special dyes at the time the fuel is sold when the tax later is to be refunded. Neither is it an adequate protection to provide for severe penalties when the law is violated. Prosecutions are very difficult, while convictions are almost impossible if public morality is low toward a particular provision of the law. Under these conditions, convictions are especially unlikely when defendants are entitled to trial by jury.

CONCLUSIONS AND RECOMMENDATIONS

1. A state should permit no gasoline-tax *exemptions* to any group or for any use except for the purpose of bulk shipments out of the state. Experience indicates that effective administration of exemption provisions is impossible from the viewpoint of preventing misuse of the exemption privilege. Should public policy or constitutional limitations require a state to refrain from applying, under certain conditions, a gasoline tax, the wiser course of action is to provide for tax refunds rather than to permit exemptions.

2. The practice should be abandoned of allowing refunds for non-use of the highways. At present there are five states (Alabama, Florida, Utah, Vermont, and Wyoming) which operate under this system of permitting no refunds.[4] Certain other states have, to a greater or lesser extent, through legislation applied curbs upon the non-highway refund privilege.

The arrangement of allowing no refunds has a number of advantages and justifications which we shall outline. First, abuse of the refund privilege can be eliminated. There are no reliable figures indicating the extent of tax evasion through the loophole of refund claims. However, there is little question that the amount of evasion is so great that the problem is very serious. Some authorities claim that illegal refunds account for nearly 50 per cent of total refunds granted. Moreover, as gasoline-tax rates have increased, prevention of this abuse of the refund privilege has become progressively more difficult. In order to survive in the competitive struggle, apparently it has often become necessary for motor fuel dealers to collude with customers in evasion of the gasoline tax. If one dealer fails to "co-operate", the customer transfers, or threatens to transfer, his business to a competitor dealer.

A further argument for discontinuing the refund arrangement is that it is becoming increasingly difficult to justify the gasoline tax solely upon the basis of direct benefits received by those driving upon public thoroughfares. In the first place, there is no assurance that highway revenue is being spent upon streets and roads travelled by particular individuals who, over a period of time, often buy and consume a great amount of taxed gasoline. For example, a city dweller may normally use his automobile only upon city streets which are constructed and

[4] Federation of Tax Administrators, *State Practices in Refunding Gasoline Taxes*, August, 1949.

maintained by special assessments or general taxes rather than by revenue from the gasoline tax. Likewise a taxicab firm or a baggage-transfer company spending thousands of dollars for gasoline used on city streets, as a necessary part of doing business, may receive no direct benefits from payment of the tax. Also, rural dwellers may ofttimes operate motor vehicles upon unimproved and poorly maintained dirt roads. Thus, payment of a motor-fuel tax by such individuals may not easily be explained upon the basis of direct benefits.

Another weakness of this benefit principle—the principle applied to justify the giving of refunds for non-highway use—is that many individuals and firms receive valuable general benefits from our highways without owning and operating a motor vehicle and, consequently, without paying any gasoline tax. Also many others receive benefits out of all proportion to the gasoline taxes which they may pay.

In a modern metropolis every person within the area receives numerous general benefits from the network of roads and highways leading into the city. These roads are used as a basis for supplying the necessities, comforts, and luxuries required or wanted by the inhabitants. The modern highway often has a steady stream of traffic, including countless trucks and busses operating as commercial and common carriers and serving the needs, not only of the urban, but also of suburban and rural people. Although these carriers pay highway taxes, the payments are usually much less than taxes paid by their competitors, the railroads. Also, even though highway taxes paid by the carriers may be shifted, at least in part, to some of those receiving benefits, the amount of tax would be small indeed as compared with benefits received.

Farmers, especially, receive many benefits from our public thoroughfares. These benefits are often unusually high as compared with the motor-fuel taxes which may be paid. Recognition of the farmers' dependence upon highways during the war led to the practice of allowing them almost unlimited amounts of gasoline at a time when the fuel was very scarce. Without the highways farmers could not carry on the business of farming, nor could they very well establish homes in the rural areas. Thus their benefits from highway expenditures are great indeed. It appears that equity would not be violated, as long as we attempt to apply the benefit doctrine, should farmers also be required to pay a tax upon motor fuel used on the farms. Usually the amount of this non-highway fuel is correlated rather closely with the amount of produce grown, much of which requires the highway for transportation to market.

Incidentally, another advantage to be gained from disallowing all non-highway refunds is that, if this loophole is plugged, the motor-fuel tax rate for everyone can be lowered. For example, if Colorado, which now has a six-cent-per-gallon tax with refunds amounting to about 20 per cent of gross receipts, should dis-

continue refunds, the tax could be reduced to 5 cents, and yet the net yield of the tax would be greater than before.

In summary, it may be stated that *direct* relationships between payment of a gasoline tax and the receiving back of special highway benefits are becoming progressively less clear. Furthermore, *general* benefits from highways are becoming so widely diffused that they extend far beyond those individuals who happen to own and operate a motor vehicle. Consequently, it may be time to adopt the practice of taxing motor fuel, regardless of the use to which it is put, in the same manner as most other excise taxes are applied. Such policy would require the discontinuance of permitting refunds for non-highway use.

STATES LIMITING AGRICULTURAL GASOLINE-TAX REFUNDS TO A PORTION OF THE TOTAL TAX

State	Gasoline Tax	Refund Permitted
Arkansas	6½¢	4½¢
Georgia	7 ¢	6 ¢
Idaho	6 ¢	5 ¢
Kentucky	7 ¢	90% of tax
Maine	6 ¢	5 ¢
Mississippi	6 ¢	5 ¢
Nebraska	6 ¢	5 ¢
North Carolina	7 ¢	5 ¢
Oklahoma	6½¢	4½¢
Pennsylvania	5 ¢	2½¢
South Carolina	6 ¢	5 ¢
Tennessee	7 ¢	6 ¢
Average (12 states)	6.33¢	4.9¢

Source: Federation of Tax Administrators, *State Practices in Refunding Gasoline Taxes*, August, 1949.

3. Should the people in a state be unable to agree upon a program of general motor-fuel taxation allowing no exemptions or refunds for non-highway use, a compromise arrangement may be possible. One compromise would be to permit a partial tax refund only and also perhaps to limit and restrict the specific purposes for which refunds may be obtained. A number of states are now experimenting with such provisions.

In addition to the five states previously mentioned which allow no refunds for any purpose, there are twelve states limiting refunds for agricultural purposes to a portion of the total gasoline tax. These states, together with the amount of refunds permitted, are shown in the table above.

There are nine states permitting no refund of the tax for aviation purposes.[5] In addition, eleven states limit the amount of tax refund to a portion of the total tax. These states are indicated in an accompanying table. States limiting the amount of refunds for agricultural or aviation purposes, as a rule, apply the same or similar limitations to refunds for other non-highway usage.

STATES LIMITING AVIATION GASOLINE TAX REFUNDS TO A PORTION OF THE TOTAL TAX

State	Gasoline Tax	Refund Permitted
Idaho	6¢	3½¢
Kentucky	7¢	95% of tax
Maine	6¢	2¢
Minnesota	5¢	1–3½¢ (depending upon quantity)
Montana	6¢	5¢
Mississippi	6¢	5¢
Nebraska	6¢	3½¢
Oregon	6¢	5¢
South Dakota	4¢	0–2¢ (depending upon quantity)
Virginia	6¢	2¢
Wyoming	4¢	0–2¢ (depending upon quantity)
Average (11 states)	5.6¢	3.4¢

Source: Federation of Tax Administrators, *State Practices in Refunding Gasoline Taxes*, August 1949.

Surely considerations discussed in connection with our previous recommendation would justify at least applying a percentage limit upon non-highway refund privileges.

4. Another compromise arrangement is to tax fully all gasoline regardless of the use to which it is put. However, an estimate can then be made of the amount of tax revenue collected from the motor fuel used for non-highway purposes, and all or a portion of this revenue can be allocated for projects directly benefiting the people or industries concerned. For example, at least part of the gasoline revenue collected from farmers can be spent for improvement of tributary and secondary roads used primarily by farmers,[6] or it can be spent for pest control, subsidized crop insurance, agricultural experimentation, or for county or state fairs. Another example may be cited. All or part of the gasoline-tax receipts collected from the aviation industry may be spent upon the development and im-

[5] These states are Alabama, Georgia, Louisiana, Michigan, New Hampshire, Pennsylvania, South Carolina, Utah, and Vermont.

[6] In Colorado an ideal arrangement may be to allocate this revenue to counties for the farm-to-market roads—roads of particular concern in current state-highway planning.

provement of airports, the lighting of airways, or for the construction of boulevards leading to airports.

This arrangement of allocating revenue for the special benefit of those groups paying gasoline taxes on fuel used for non-highway purposes, even though all such tax receipts might go for these special benefits, would be an improvement over the system of refunds now extensively allowed in many states. The big advantage would be that the refund loophole permitting illegal evasion of the tax could be eliminated.

5. The state should refrain from granting refunds to the various divisions of state and local government and to private contractors working for these governments. Payment of the motor-fuel tax without privilege of refund places no real burden upon governmental units. Moreover, the slight burden, if there be one, is more than offset by the achievement of certain public advantages. First, an element of subsidy to those agencies, institutions, or divisions of government using fuel upon the highway is avoided. This facilitates keeping track of the true cost of each governmental service and function and makes possible a better comparison with what the service might cost if performed by private individuals. Secondly, an even more important advantage is achieved when governmental units are not allowed refunds. The system removes one more loophole from the tax law—a loophole often permitting, albeit illegally, the diversion of untaxed gasoline to private use.

At present only nine of the forty-eight states permit exemptions or refunds for state and local governmental uses. Moreover, some of these nine states restrict governmental exemptions and refunds to certain purposes only. Nevertheless, these few states might well repeal their provisions which allow exemptions and refunds for state and local governments.

6. Refunds to the Federal government should be allowed only when purchases are made in bulk quantities to responsible Federal authorities who would be required to certify that the tax-free motor fuel has been, or is to be, used for strictly governmental as contrasted with proprietary functions.

To summarize, we may say that the special-benefit doctrine as a justification for the gasoline tax is becoming obsolete. Consequently, the system of tax exemptions and refunds which developed under this doctrine should be re-examined from the viewpoint either of greatly modifying and restricting exemption and refund provisions, or else of repealing them completely. As gasoline-tax rates go up, increasing tax evasion makes this re-examination a necessity.

CHAPTER V

THE INCOME TAX

The Colorado income tax[1] was established in 1937 after a struggle among various economic groups extending over a period of twenty-five years. The 1937 law, as finally enacted, contained very liberal exemptions and low tax rates. Consequently, the measure was a partial disappointment to those who had sponsored for so long the income-tax reform. However, there was general agreement by members of the legislature that after a trial period the tax could and perhaps should be strengthened. Ten years later, in 1947, when the state faced financial difficulties, exemptions and rates were changed so as to make the tax more productive of revenue. Provisions of this amendment of 1947 were made to expire December 31, 1948. However, in 1947, the General Assembly re-enacted the amendment, extending the features of the 1947 law until June 30, 1951. Both of these terminating dates (1948 and 1951) were placed in the income-tax amendment by members of the legislature who either believed that requirements for additional revenue were temporary only, or else were opposed in principle to the income tax.

ORIGINAL AND AMENDED LAWS COMPARED

Provisions of the basic law of 1937 and of the amended law of 1947 may be summarized as follows:

PERSONAL INCOME TAX

Exemptions

1937	Single person	$1,000
	Head of family	2,500
	Each dependent (other than spouse)	400
1947	Taxpayer	$750
	Spouse & each dependent	750

Rates

Net income	*1947 per cent*	*1937 per cent*	*Net income*	*1947 per cent*	*1937 per cent*
Under $1,000	1	1	6,000 to 6,999	5	4
$1,000 to 1,999	1½	1	7,000 to 7,999	6	4
2,000 to 2,999	2	2	8,000 to 8,999	7	5
3,000 to 3,999	2½	2	9,000 to 9,999	8	5
4,000 to 4,999	3	3	10,000 to 10,999	9	6
5,000 to 5,999	4	3	all over 11,000	10	6

[1] For a more complete discussion of Colorado's income tax, see the writer's monograph, *The Colorado Income Tax*, November 1946, University of Colorado, Boulder, Colorado.

Surtax on Income from Intangibles[1]

Exemption 1937	Exemption 1947[2]	Rate 1937	Rate 1947
—	$200	2%	2%

[1] In lieu of all property taxes on intangibles.
[2] This exemption was introduced through an amendment in 1943.

CORPORATION INCOME TAX

	Tax rate 1937	Tax rate 1947
General corporations	4%	5%
Financial corporations	6%	6%

Yield of the Colorado income tax, by years, since enactment of the law in 1937 is indicated in the accompanying table. Collections prior to the amendment of 1947 were relatively low because of very liberal features of the law. Even the inflationary period of the war did not increase the yield of the tax much above $6 million per year. However, as the full effect of the 1947 amendment (achieved in 1949) became reflected in collections, yield of the tax nearly tripled. Of course,

COLORADO INCOME-TAX COLLECTIONS, BY TYPE OF RETURN
(Calendar Years 1938 to 1949)

Year	Total Collections	Individuals	Corporations	Fiduciaries
1938[1]	$1,284,403	$ 722,770	$ 561,633	$ —
1939	2,829,302	1,729,629	1,054,447	45,226
1940	3,361,132	2,091,243	1,224,768	45,121
1941	3,543,432	2,398,859	1,106,286	38,287
1942	4,596,081	3,084,783	1,441,273	70,025
1943	6,160,740	3,620,668	2,455,802	84,270
1944	6,359,497	3,302,384	2,976,493	80,445
1945	6,126,933	3,035,378	3,038,556	52,987
1946	6,831,666	4,124,318	2,628,694	78,654
1947	9,631,494	5,647,859	3,861,995	121,640
1948	12,373,555	7,006,222	5,273,924	93,409
1949	18,698,920	12,053,892	6,465,992	179,036

[1] Six months only. The law became operative July 1, 1937, collections beginning the subsequent year.

Source: *Colorado Year Book*, 1945–47, p. 471; *Colorado Revenue News*, January 1950, Colorado Department of Revenue.

part of this postwar increase had been due to the phenomenally high level of production, employment, prices and income which cannot be expected to continue indefinitely.

COMPARISON WITH OTHER STATES

The extent to which Colorado is now utilizing the income tax as a revenue measure may be appreciated by comparing income-tax collections with total state tax collections from all sources. In the fiscal year ending June 30, 1949, the state received 20 per cent of all tax revenue in the form of the income tax. How this ratio of 20 per cent compared with ratios in the other thirty-four states levying an income tax may be seen by referring to the accompanying table.

ORDER OF STATES ACCORDING TO PERCENTAGE OF TOTAL STATE TAXES COLLECTED IN THE FORM OF THE INCOME TAX, FISCAL YEAR 1949[1]

Rank	State	Income tax as percentage of total tax collections	Rank	State	Income tax as percentage of total tax collections
1	Oregon	56.8	18	California	16.9
2	Wisconsin	46.1	19	Utah	16.8
3	New York	43.3	20	Arizona	16.7
4	Idaho	32.1	21	Rhode Island	16.7
5	South Carolina	32.0	22	Connecticut	16.4
6	North Carolina	31.1	23	Kansas	15.8
7	Minnesota	30.6	24	Delaware	15.1
8	Massachusetts	30.6	25	Missouri	14.2
9	Virginia	28.3	26	Iowa	14.0
10	Montana	25.3	27	Mississippi	13.8
11	Georgia	24.8	28	Alabama	12.2
	Average, 35 States	24.0	29	Oklahoma	11.9
12	Maryland	21.9	30	Arkansas	11.7
13	Pennsylvania	21.4	31	Louisiana	8.6
14	COLORADO	20.0	32	Tennessee	8.3
15	Vermont	19.6	33	New Mexico	5.8
16	Kentucky	18.5	34	New Hampshire	4.8
17	North Dakota	17.9	35	South Dakota	.6

[1] Excluding unemployment-compensation tax.

Source: *State Tax Collections*, 1949, Bureau of the Census.

It may be seen from the table that income-tax receipts expressed as a percentage of total tax receipts ranged from 56.8 per cent in Oregon to .6 of one per cent in South Dakota. The average for the thirty-five states with income taxes was 24 per cent. Thus Colorado's ratio of 20 per cent was slightly below the general average. It was far below the ratios for Oregon, Wisconsin, and New York, where about one half of all state revenue came from the income tax.

Another excellent basis for comparison of Colorado's income tax with the same

INCOME PAYMENTS TO INDIVIDUALS AND INCOME-TAX COLLECTIONS, BY STATES, EXPRESSED IN MILLIONS OF DOLLARS AND AS PERCENTAGES TO EACH OTHER

Rank	State	Income payments to individuals, 1948[1]	Income-tax collections 1949[2]	Income tax related to income payments (percentage)
1	Oregon	$ 2,134	$ 55.9	2.62
2	North Carolina	3,531	65.5	1.86
3	Wisconsin	4,763	87.4	1.83
4	South Carolina	1,714	30.0	1.76
5	Idaho	734	9.5	1.29
6	Minnesota	3,970	49.9	1.26
7	New York	27,378	321.6	1.18
8	Arizona	823	9.3[3]	1.12
9	Virginia	3,326	36.9	1.11
10	COLORADO	1,713	17.0	.99
11	Massachusetts	6,997	68.7	.98
12	Georgia	3,076	27.0	.88
13	Utah	825	7.2	.87
14	Maryland	3,116	26.2	.84
15	Vermont	446	3.6	.81
16	Mississippi	1,603	12.0	.75
17	North Dakota	858	6.4	.75
18	California	17,099	126.5	.74
19	Kentucky	2,596	19.0	.73
20	Louisiana	2,597	19.0	.73
21	Oklahoma	2,361	17.1	.73
22	Montana	915	6.4	.70
23	Kansas	2,446	15.7	.64
24	Pennsylvania	15,126	94.8[5]	.63
25	Rhode Island	1,165	6.7[5]	.58
26	Arkansas	1,672	9.5	.57
27	Alabama	2,585	13.2	.51
28	Iowa	3,895	19.6	.50
29	Delaware	522	2.4[4]	.46
30	Connecticut	3,381	15.3[5]	.45
31	Missouri	5,278	22.0	.42
32	New Mexico	643	2.5[3]	.39
33	Tennessee	3,036	11.6	.38
34	New Hampshire	659	1.0[4]	.15
35	South Dakota	963	.2[5]	.002
	TOTAL	$133,946	$1,236.6	.92 (average)

[1] Calendar year. [2] Fiscal year. [3] Estimated by increasing the 1948 amount by 13% (national-average increase). [4] Has individual-income tax only. [5] Has corporation tax only.

Source: *State Tax Collections in 1949*, August, 1949, Bureau of the Census.

tax in other states may be obtained by relating income-tax collections to income payments to individuals. This comparison is given in the preceding table.

Income payments to individuals in the form of wages, salaries, interest, rent and profits make an ideal index for measuring ability to pay income taxes. As 1949 tax collections were based upon income earned the previous year, income payments in 1948 are included in the table. It may be observed that, in effect, Oregon applied an income tax equal to 2.62 per cent of the $2,134,000,000 of income going to individuals within the state. This was a much larger percentage than found in any other state. However, there were nine states for which the ratio was above one per cent. Thirteen states, including Colorado, had a ratio falling between .7 of one per cent and one per cent, while thirteen states had a ratio lower than .7 of one per cent. The average for all thirty-five states was .92 of one per cent, a figure not very different from the .99 of one per cent in Colorado.

Thus, according to both of the state comparative tables, although Colorado, with her lower exemptions and higher rates than formerly, appears to be stressing the income tax somewhat more than the median state, she approximates very closely the average (arithmetic mean) of all thirty-five states combined. Should existing rates and exemptions (1947 amendment) be terminated in 1951, as will occur unless they are extended by the next General Assembly, a return to the original law of 1937 would again place Colorado among those states with an income tax yielding a relatively insignificant amount of revenue.

THE USE MADE OF INCOME-TAX RECEIPTS

Since adoption of the income tax in 1937, a large proportion of tax receipts have always been utilized as state aid to the public schools. Initially, all resulting income-tax revenue was earmarked for elementary and secondary schools and, although this earmarking system was later modified and then completely dropped by 1947, much of the revenue obtained from the tax, after going into the state's general fund, has been appropriated by the General Assembly for the public schools. For example, in 1949 the elementary and secondary schools obtained about four-fifths of the anticipated tax receipts, which had been expected to equal $11,000,000.[2] However, as actual collections exceeded $18,000,000, the proportion of the total received by the public schools was about one half of this.

In addition to the public schools, the state institutions have been partially supported during recent years by the income tax. Also revenue from the tax has been utilized to provide financial support for general state governmental functions. Thus the income tax, since the 1947 amendment, has rather effectively bolstered the state's revenue system during a period of inflationary prices and

[2] *Budget Report*, January, 1949, State of Colorado.

costs when state property-tax rates have been held down to a minimum and when sales, liquor, and other excise taxes have gone for old age pensions or for general relief.

ADVANTAGES OF THE INCOME TAX

The income tax has become so much a part of the Federal and state revenue systems that a defense of the tax, as such, is scarcely necessary. Perhaps the principal area of controversy pertains to the question as to how much dependence a state should place upon this form of revenue.

It is the firm conviction of the writer that a considerable proportion, certainly not less than 20 or 30 per cent, of the state's tax revenue should come from the income tax. This point of view is based upon a number of considerations. First and foremost is the well-recognized principle that the most satisfactory single basis for taxation is ability to pay and that net income is the most acceptable measure of this ability. Thus the income tax, with possibilities of both exemptions and progressive rates, can be made fair and equitable. In Colorado, where so much reliance is being placed upon sales and use taxes, it is especially important that the state also have a "healthy" income tax in order to counteract the regressive effect of the sales and use taxes. Moreover, to the extent that the income tax is developed, the overworked property tax can be lightened, thus further adding to the equity of the whole tax structure.

A second advantage of the income tax is related to the first. In a sense, all taxes ultimately must be paid out of income. Therefore, it may be reasonably urged, why not directly tax income as much as possible rather than do so indirectly through other forms of taxation? To the extent that this can be done we are able fairly to distribute tax burdens—the income tax "stays put". Moreover, it is advantageous to bring "hidden" taxes out into the open.

A third advantage of the income method of taxation, especially when applied to individuals, is that the tax has a minimum adverse effect upon investment, production, and employment. The tax being personal in nature and levied upon a surplus rather than a cost, there is less chance that the measure will discourage initiative or deter incentive than if an equal amount of revenue were to be obtained from a property, gross-receipts, or business-license tax. Although this favorable situation pertains especially to the personal income tax, it also is present, to a lesser degree, when the corporate-income tax is utilized. The officials of a corporation are less likely to be discouraged by an income tax which they can disregard if profits are not earned than when substantial taxes, based upon property or gross revenue, must be paid each year regardless of earnings or losses.

A fourth favorable feature of the income tax is that the measure injects into the economic system a desirable counter-cycle effect. Economists and fiscal au-

thorities are just beginning to appreciate this advantageous counter-cycle influence. If the intensity of the "boom and bust" phases of the business cycle can be reduced, a more stable, continuous, and satisfactory level of production and general wellbeing can be maintained. As income-tax collections automatically increase during times of rising prices and inflation, there is some deterring influence upon the development of an unhealthy boom. On the other hand, during a period of falling prices, recession, low production, and pessimism, the automatic shrinkage of the income tax tends to keep the depression from becoming as severe as it perhaps would under a system of more inflexible levies where tax loads continue on very much the same level.

Considering all factors, the writer is convinced that Colorado's existing income tax, with the 1947 exemptions and rates, is a sound and satisfactory revenue measure. It compares favorably with the better income-tax laws of the other states. Its yield in revenue, related to income payments to individuals, is about equal to the average revenue received by the thirty-five states with income taxes. Moreover, the existing relatively greater emphasis being placed upon the individual as compared with the corporation income tax—in 1949 individuals paid $12 million while corporations paid $6½ million—is in accordance with principles set forth above. Consequently, it is believed that existing provisions of the law (the 1947 amendment) which will terminate June 30, 1951, unless re-enacted, should be re-enacted by the next General Assembly, becoming a continuing part of the basic law.[3]

[3] In August, 1950, a special session of the General Assembly, called by Governor Johnson, amended the income-tax law by reducing existing tax rates. These reductions can neither be described nor analyzed in this study because of the lack of time.

CHAPTER VI

THE INHERITANCE TAX AND OTHER TAXES

Colorado began taxing inheritances in 1901, at a time when this method of taxation was just beginning to become a regular part of the tax structure of American states. Since 1901, the inheritance-tax measure has been amended at various times. However, only minor changes in the basic law have occurred during recent years.[1] The present Colorado law permits exemptions ranging from $500 for collateral and non-relative heirs to $20,000 for widows. Tax rates are graduated from 2 to 16 per cent, depending upon the classification of beneficiary and the amount of bequest. Also, at present, there is an additional rate amounting to 10 per cent of the basic tax which is collected and allocated for the old-age pension fund.

In addition to the inheritance tax, there is an estate tax in Colorado. However, this latter measure is merely utilized to absorb in all cases the 80 per cent credit allowed under the 1926 basic Federal estate tax.[2] In other words, the state estate tax is not really intended to be an important revenue measure. It supplements the inheritance tax in a minor way, being applied only under unusual circumstances.

COLORADO INHERITANCE, ESTATE, AND GIFT TAX RECEIPTS, BY YEARS
(1930–1949)

Fiscal Year	Tax receipts	Fiscal Year	Tax receipts
1930	$1,126,377	1940	$1,206,876
1931	999,510	1941	1,354,635
1932	756,497	1942	1,191,307
1933	452,982	1943	1,373,949
1934	1,130,306	1944	1,433,548
1935	551,131	1945	1,110,657
1936	789,440	1946	2,469,838
1937	996,700	1947	1,588,733
1938	1,312,813	1948	2,231,533
1939	943,826	1949	1,911,245
		Average (20 yrs)	$1,246,000

Sources: *Colorado Year Book*, 1943–44 and 1945–47; for years 1947–1949, letter from Division of Accounts and Control, Colorado State Capitol.

[1] Chapter 85, *1935 Statutes Annotated* with amendments to date.

[2] The basic estate-tax law (Federal) is found in the Internal Revenue Code, Sec. 810 et seq.

The state also has a gift tax, initiated in 1937, whose rates and exemptions correspond to those of the inheritenace tax.[3] The purpose of the gift tax, found also in eight other states, is largely to remove one of the loopholes of inheritance-tax evasion. Thus, although the gift-tax law probably serves an important function, assisting with effective administration of the inheritance tax, it never has yielded very much revenue.

STATE DEATH AND GIFT TAXES EXPRESSED AS PERCENTAGE OF TOTAL STATE TAXES, BY STATES (Fiscal Year 1949)

Rank	State	Percentage	Rank	State	Percentage
1	Connecticut	6.7	25	Minnesota	1.4
2	New Jersey	6.2	26	South Dakota	1.4
3	New Hampshire	5.7	27	Georgia	1.3
4	Pennsylvania	5.7	28	Texas	1.3
5	Massachusetts	4.9	29	North Carolina	1.2
6	Delaware	4.6	30	Oklahoma	1.1
7	Missouri	4.1	31	West Virginia	1.1
8	New York	3.7	32	Florida	1.0
9	Rhode Island	3.4	33	Kansas	1.0
10	Maine	3.2	34	Ohio	1.0
11	California	2.9	35	Utah	1.0
12	Wisconsin	2.9	36	Virginia	1.0
13	Montana	2.5[1]	37	South Carolina	.8
14	Iowa	2.3	38	Wyoming	.8[1]
15	Michigan	2.3	39	Idaho	.7
16	Maryland	2.2	40	Louisiana	.7
17	COLORADO	2.1	41	Alabama	.4
18	Kentucky	2.0	42	Nebraska	.4
19	Illinois	1.9	43	North Dakota	.4
20	Vermont	1.9	44	New Mexico	.3[1]
21	Washington	1.8	45	Mississippi	.3
22	Oregon	1.7	46	Arizona	.2[1]
23	Tennessee	1.7	47	Arkansas	.2
24	Indiana	1.5	48	Nevada	—
				AVERAGE (47 states)	2.4

[1] Based upon 1948 collections.
Source: *State Tax Collections*, 1949, Bureau of the Census.

The death and gift tax laws are administered by an inheritance-tax commissioner appointed by and holding office at the pleasure of the Attorney General.

An accompanying table shows Colorado inheritance, estate, and gift tax receipts, by years, for the last two decades. It will be noted that receipts have re-

[3] Chapter 161, *Sessions Laws*, 1937.

mained remarkably stable, fluctuating from a low of $452,982 in 1933 to a high of $2,469,838 in 1946. The average yield for the twenty-year period was $1,246,000, and it may be observed that the yield in most of the years deviated but slightly from this average.

It has been frequently stated that one disadvantage of the inheritance tax is an unstable yield of revenue. However, this alleged instability has not been encountered during recent years in Colorado.

All states except Nevada now apply some form of death tax—either an inheritance tax or an estate tax or a combination of both. However, in no state does the resulting revenue contribute very significantly to the support of state governmental functions. An accompanying table shows state death and gift taxes expressed as a percentage of total state taxes for the fiscal year 1949. Connecticut had the highest ratio with a percentage of 6.7, while sixteen states had a percentage of one or less. The average for all states was 2.4 per cent, which corresponded rather closely with the 2.1 per cent found in Colorado.

The writer has not studied the administrative aspects of the inheritance-tax law and, consequently, is not presenting any suggestions in this report for improvement either of the law or of its administration.

OTHER TAXES

Sales, use, and liquor taxes in Colorado, currently yielding over $30 million (1949) and accounting for over one third of all state tax revenue, are not included for analysis in this study. Although there are undoubtedly various aspects of these taxes justifying even a detailed treatment, we have chosen not to include them for study at this time for at least two reasons. In the first place, 85 per cent of the revenue from these sales, use, and liquor taxes is constitutionally earmarked for old age pensions, while the other 15 per cent has been earmarked by the legislature for general relief purposes. Moreover, the old age pension constitutional provision requires retention of these taxes unless equivalent revenue is substituted. Consequently, even though the taxes may be regressively inequitable revenue measures, as they are based upon consumption, there is little possibility that anything can be done about this inequity without amending the state constitution. A second reason for not including at this time an analysis and appraisal of these taxes is that they were briefly appraised in the writer's most recent previous monograph on taxation in Colorado, published in 1948.[4]

The insurance-company tax and several other special business taxes are not included in this study, the reason being that the writer intends later to publish, under separate cover, a special survey of business taxation in Colorado.

[4] *Old Age Pensions in Colorado*, January, 1948, University of Colorado, Boulder, Colorado.

CHAPTER VII

SUMMARY AND CONCLUSIONS

1. During the last twenty years, which included the "Depression Decade" of the thirties and the "War Decade" of the forties, rather profound changes occurred in Colorado's tax structure. These changes were both quantitative and qualitative in nature.

2. During the two decades, state tax collections increased from $15 million at the beginning of the period (1930) to $87 million at the end of the period (1949). This represented an increase of almost six fold.

3. This seemingly large increase is partly accounted for in terms of rising national income accompanied by rising general prices and costs. Thus, if total tax collections are corrected for the changing value of the dollar, as indicated by the index of wholesale prices, the "real" tax increase was about three fold instead of six fold. Again, if total taxes are related directly to income payments to individuals residing in the state, the resulting tax index increased only two fold for the twenty-year period.

4. This two- or three-fold "real" increase of state taxes was largely due to the adoption of several new sources of revenue during the period—namely, the sales, use, and liquor taxes ($31 million in 1949) allocated primarily for old age pensions, and the income tax ($18 million in 1949), about half of which has recently been utilized for aid to the public schools.

5. During the two decades, adoption of the new revenue sources, in effect, made the state's tax structure more regressive, and thus less equitable, than it previously had been. Although adoption of the income tax represented genuine tax reform, enactment of the sales and use tax measures did not. Thus, although in 1930, 55 per cent of the state's taxes were in the form of indirect or consumption taxes, the proportion was even greater (70 per cent) by 1949.

6. Although the property tax has always been the "backbone" of Colorado's state and local revenue system, during recent years its relative importance in the state's tax structure has declined. By 1949, the property tax accounted for only 7.6 per cent of all state tax revenue. This Colorado trend toward decreasing dependence upon the property tax, by the state, as contrasted with local units of government, is in accord with a national trend, a few states having even entirely abandoned the tax for state purposes.

7. Although certain advantages may be gained by complete withdrawal of the state from the property-tax field, there are disadvantages or losses which probably more than offset these gains. Consequently, rather than abandonment of the tax, it is recommended that the state retain the tax, keeping mill levies to a minimum consistent with state revenue stability requirements.

8. The state reappraisal program begun in 1947 and scheduled for completion in 1951 should result in a vastly improved property-tax system. However, as the Tax Commission has decided to place the new assessed values upon the basis of 1941 prices and costs, rather than upon some more current basis, part of the expected improvement in the tax may be lost. Moreover, in order to retain benefits from the reappraisal program, state-wide continuous supervision in the future will be necessary.

9. In 1949 less than 10 per cent of the oil produced in the nation escaped a severance tax. However, Colorado was still among the minority of oil-producing states not applying this form of levy. Although severance-tax bills were defeated (narrow margins) in the last two legislative sessions, the pending gubernatorial and state General Assembly elections will probably again bring to focus the various considerations relating to an oil severance tax. Consequently, it may be assumed that the issue is still a live one.

10. The writer is convinced that in view of all factors involved, Colorado's tax structure would be improved by the enactment of a state severance tax upon oil. The tax rate might well be 5 per cent of the gross value of crude oil—the approximate average applied to petroleum in the leading oil-producing states. Resulting revenue—$2 to $3 million annually—could be utilized to reduce the state's mill levy upon all classes of property, to support more adequately the state's institutions and governmental functions, or to increase state aid to the public schools.

11. Abuse of the gasoline-tax refund privilege has become a critical problem in many states, including the state of Colorado. In this state in 1949, refunds were $4,248,000 or nearly 22 per cent of net motor-fuel tax collections. Because of the difficulty of administering refunds, also because of a declining validity of the gasoline-tax *benefit* principle, the writer suggests that the practice of permitting refunds for non-highway use should be abandoned. In lieu of this refund privilege, a reasonable proportion of gasoline-tax revenue could be allocated for the improvement of farm-to-market roads, for farm pest control or crop insurance, for development of airports and boulevards leading to airports, and the like.

12. Colorado's income-tax law, enacted in 1937, contained liberal exemptions and very low tax rates until the measure was amended in 1947. The amendment, made to terminate after two years, was re-enacted in 1949 for another two-year period. Consequently, unless again extended, the 1947 amendment will expire June 30, 1951. The writer believes that the existing rates and exemptions contained in the 1947 amendment should be re-enacted by the next General Assembly, becoming a continuing part of the basic law. These present rates and exemptions compare favorably with those of income-tax measures to be found in the states classified as possessing excellent tax systems. Moreover, current collections amounting to 20 per cent of total Colorado state tax revenue compare favorably

with the 24 per cent collected in this form of taxation by the thirty-five states levying income taxes.

As the state of Colorado has much of her revenue constitutionally earmarked for special purposes and as these earmarked taxes are largely regressive in effect, it is especially important to utilize, as fully as possible, for the state's general fund, the income tax with its progressive rates, which can counteract to some extent the regressive features of the other taxes. Consequently, the writer believes that it would be a serious mistake to relegate the income tax to the insignificant position which it would be forced to take if we were to return again to the rates and exemptions of 1937.

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